

Application No.: 10/502,423

Amendment to the Drawings:

The attached sheet of drawings includes changes to FIG. 2. This sheet, which includes FIGS. 1-2, replaces the original sheet showing FIGS. 1-2. The Drawings were amended to change reference numbers in FIG. 2 as shown.

Attachment: Replacement Sheet

REMARKS

Drawings

Figure 2 has been objected to because of minor informalities. Figure 2 has been replaced with the drawings as originally filed.

Specification

The specification has been objected to due to informalities. Included is a Substitute Specification including a marked-up version of the changes made via by the present amendment. No new matter has been added. However, the arguments (m, r, v) are correct as they appear in the specification.

Claim Rejection – 35 U.S.C. §103

Claims 14-17 have been rejected under 35 U.S.C. §103(a) as being unpatentable over the combination of J. Kim et al. (U.S. Publication No. 2003/0031128 A1), hereinafter Kim03, and H. Kim et al. (U.S. Publication No. 2002/0126757 A1), hereinafter Kim 02.

The Examiner states that Kim03 discloses the claimed invention except for the coding system to perform the intra/inter block selection. Applicants submit that Kim03 fails to disclose several other claim limitations, as follows.

1. Coding the macro blocks to determine accessible reference images

In paragraph [0008] of Kim03, three coding modes are disclosed: intra-frame, predicted frame and bi-directional frame. However, the reference fails to disclose a use of a selection of several or multiple reference frames when performing one of the coding modes. MPEG4 does not support multiple reference frames. Moreover, Kim03 refers to a single reference image: “in a previous frame” when coding (see, paragraph [0019]). Finally, at page 5, first paragraph of the Office Action, the Examiner states “using the motion information to compensate the previous decoded frame or VOP.” However, Kim03 fails to disclose a determination of accessible reference images, since the video encoder always uses on particular previously decoded frame for inter-prediction.

2. Coding another section of the macro blocks of the image in a second intra-coding mode

The Examiner cites paragraph [0016] as disclosing this feature. Applicants disagree, as this section of the reference fails to disclose a second intra-coding mode, as required by the claimed invention. Rather, Kim03 uses the three coding modes and does not differentiate coding strategy based on particular intra-coding modes. In the claimed invention, on the other hand, coding strategy of the inter-coding for images at a later stage depends on the two intra-coding modes. Hence, Kim03 fails to disclose the use of two intra-coding modes and performing coding dependent upon two intra-coding modes for images at a later stage.

3. Limiting the selection from the number of accessible reference images...not subjected to the first intra-coding mode at a later stage

The Examiner again cites paragraph [0016] as disclosing this feature. Applicants respectfully disagree. This portion of the reference refers to a calculation of an inter-code distortion value and an intra-code distortion value. Both values are calculated for encoding macroblocks in a predicted (i.e. one) frame. Hence, in this calculation, an evaluation is made as to whether a particular macroblock will be coded as intra or inter-coding mode according to the respective values. This procedure only determines the coding mode, but not limiting the selection from the number of accessible reference images, as required by the claimed invention.

Claims 18-23 have been rejected under 35 U.S.C. §103(a) as being unpatentable over the combination of Kim03 and Kim02 and further in view of Yokoyama et al. (U.S. Patent No. 6,078,618). The rejection is respectfully traversed for at least the same reasons presented in the arguments above.

In view of the above, Applicants submit that this application is in condition for allowance. An indication of the same is solicited.

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The Commissioner is hereby authorized to charge deposit account 02-1818 for any fees which are due and owing, referencing Attorney Docket No. 112740-987.

Respectfully submitted,

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